



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,458	10/01/2003	Yosuke Tamura	243395US6	5492

22850 7590 05/26/2006

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

SYED, FARHAN M

ART UNIT PAPER NUMBER

2165

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/674,458	<b>Applicant(s)</b> TAMURA, YOSUKE	
	<b>Examiner</b> Farhan M. Syed	<b>Art Unit</b> 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 7-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-31 are pending.
2. Claims 7-31 are withdrawn from consideration.

***Election/Restrictions***

3. Applicant's election with traverse of Group I, claims 1-6, in the reply filed on April 24, 2006 is acknowledged. The traversal is on the ground(s) that the claims of the present invention would appear to be of an overlapping search area. This is not found persuasive because the inventions Group I, II, III, IV and Group V are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, Inventions in Group I has a separate utility such as a data processing system that includes chain managers and a chain directory storing corresponding data and executing a service retrieval process. Group II has a separate utility such as an information processing apparatus serving as a chain manager that encompasses a data processing system. Group III has a separate utility such as an information processing apparatus serving as a root chain manager for performing control of a data processing system. Group IV has a separate utility such as an information processing apparatus serving as a chain directory for performing an information providing process as to a data processing

server. Group V has a separate utility such as a data processing method for a service chain including a plurality of chain objects, where each is given a unique ID.

The requirement is still deemed proper and is therefore made FINAL.

### ***Specification***

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. The disclosure is objected to because of the following informalities: lack of spacing between words throughout the Applicant's specification.

Appropriate correction is required.

6. The claims are objected to because the lines are crowded too closely together, making reading difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

### ***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Art Unit: 2165

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per claims 1-6, the claims clearly recite chain objects to include "other apparatus, goods, living things, books, stones, walls, and the like," based on the Applicant's specification on page 5, lines 23-25 and stated throughout the Applicant's specification. However, living things, books, stones, walls, and the like cannot tangibly embody a data processing system, since the data processing system will fail to produce a tangible result. Therefore, the chain objects that include goods, living things, books, stones, walls, and the like do not meet the "useful, concrete, and tangible" requirement as set forth in *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02, and hence claims 25-32 are non statutory under 35 U.S.C. 101.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Mattaway et al (U.S. Patent No. 6,131,121 and known hereinafter as Mattaway).

As per claim 1, Mattaway teaches a data processing system comprising: a plurality of chain managers for performing control of a data input and/or data output service (i.e. *"The processor 14 receives input commands and data from a first user associated with the first processing unit 12 through the input device 18, which may be an input port connected by a wired, optical, or a wireless connection for electromagnetic transmissions, or alternatively may be transferable storage media, such as floppy disks, magnetic tapes, compact disks, or other storage media including the input data from the first user"* *"The first processing unit 12 may include a visual interface for use in conjunction with the input device 18 and output device 20 similar to those screens illustrated in FIGS. 5-6, discussed below."* *"In addition, either of the first processing unit 12 and the second processing unit 22 may be implemented in a personal digital assistant (PDA) providing modem and E-mail capabilities and Internet access, with the PDA providing the input/output screens for mouse interactions or for touchscreen activation as shown, for example, in FIGS. 5-6, as a combination of the input device 18 and output device 20."* The preceding text clearly indicates that a plurality of chain managers are the first and second processing units, where the prior art exemplifies that a first processing unit receives commands and data from a first user associated with the first processing unit. According to the Applicant's specification, the first user would be the chain object, thus the first processing unit would be the chain manager. Both processing units contain input/output devices, which are the data input and/or data output services controlled by the plurality of chain managers.)(Column 5, lines 25-32; 45-48; lines 61-67), the data input and the data output service handling data associating with one or more chain objects and having a predefined file format and/or data type (i.e. *"The following E-mail messages are transmitted to a remote users post office protocol server via simple mail transport protocol using MIME by the event manager, as explained hereinafter."* The preceding text clearly indicates that one or more chain objects are remote users, based on the Applicant's specification, where chain objects are defined as displays, printers, PCs, PDAs, etc. The data input and output services handling data was

Art Unit: 2165

addressed above, which is contained within the first and second processor. The preceding text provides an illustration where the first processing unit transmits E-Mail messages to the one or more chain objects, and the E-mail messages use a MIME file format.)(Column 8, lines 7-10); a chain directory for storing correspondence data and performing an executable service retrieval process (i.e.

*"The first processing unit 12 then sends a query, including the E-mail address of the callee, to the connection server 26. The connection server 26 then searches the database 34 to determine whether the callee is logged-in by finding any stored information corresponding to the callee's E-mail address indicating that the callee is active and on-line."* The preceding text clearly indicates that a chain directory is a database and storing correspondence data is stored information corresponding to the callee's E-mail address, and performing an executable service retrieval process is performing a search or sending a query to retrieve results.)(Column 7, lines 25-30), the correspondence data storing correspondence relations among identifiers (ID) set on the chain managers, identifiers (ID) of chain objects associating with the chain managers, data input and/or data output services associated with the chain objects, and file formats and/or data types that can be used in the data input and/or data output services, the executable service retrieval process being performed by matching of the file formats and/or data types and matching of the data input and the data output services (i.e. *"The connection server 26 includes a processor 30, a timer 32 for generating time stamps, and a memory such as a database 34 for storing, for example, E-mail and Internet Protocol (IP) addresses of logged-in units."* *"The first processing unit 12 then sends a query, including the E-mail address of the callee, to the connection server 26. The connection server 26 then searches the database 34 to determine whether the callee is logged-in by finding any stored information corresponding to the callee's E-mail address indicating that the callee is active and on-line. If the callee is active and on-line, the connection server 26 then performs the primary point-to-point Internet protocol; i.e. the IP address of the callee is retrieved from the database 34 and sent to the first processing unit 12. The first processing unit 12 may then directly establish the point-to-point*

Art Unit: 2165

*Internet communications with the callee using the IP address of the callee.*" The preceding text clearly indicates that the corresponding relationships are stored in a database, where the corresponding relationship include identifiers for chain objects, which are IP addresses for at least one processing unit, file format/data types, which are MIME format and used to communicate E-mail messages.)(Column 4, lines 51-54; Column 7, lines 25-36); and a root chain manager for acquiring one chain object ID and performing a query process to the chain directory, the query process inquiring a chain object that uses the data output or data input service having the same file format and/or data type as that of the data input or data output service associating with the chain object with the acquired ID (i.e. *"The first processing unit 12 then sends a query, including the E-mail address of the callee, to the connection server 26. The connection server 26 then searches the database 34 to determine whether the callee is logged-in by finding any stored information corresponding to the callee's E-mail address indicating that the callee is active and on-line."* *"The following E-mail messages are transmitted to a remote users post office protocol server via simple mail transport protocol using MIME by the event manager, as explained hereinafter."* The preceding text clearly indicates that the connection server can also be the root chain manager, based on the Applicant's specification. The data input and output services handling data was addressed above, which is contained within the first and second processor. The preceding text provides an illustration where the first processing unit transmits E-Mail messages to the one or more chain objects, and the E-mail messages use a MIME file format.)(Column 7, lines 25-30; Column 8, lines 7-10); wherein the chain manager ID and the chain object ID are identifiers that are defined in address spaces different from each other (i.e. *"In the exemplary embodiment and without loss of generality, the first processing unit 12 is the caller processing unit and the second processing unit 22 is the callee processing unit. When either of processing units 12, 22 logs on to the Internet via a dial-up connection, the respective unit is provided a dynamically allocated IP address by an Internet service provider."* The preceding text clearly indicates that the chain manager ID is the first processing unit and the second processing unit is the chain object.



Both IDs, which are IP addresses, are assigned different address spaces, when assigned dynamically.)(Column 6, lines 53-59).

As per claim 2, Mattaway teaches a data processing system wherein: the root chain manager is configured to generate a service query packet to perform the query process to the chain directory (i.e. *"The connection server 26 then searches the database 34 to determine whether the callee is logged-in by finding any stored information corresponding to the callee's E-mail address indicating that the callee is active and on-line."* *"The connection server 26 may be instructed to update the user's information in the database 34 by an off-line message, such as a data packet, sent automatically from the processing unit of the user prior to being disconnected from the connection server 26."* The preceding text clearly indicates that the connection server is the root chain manager that generates a service query packet, which is a data packet, to perform the query process, which is the search that it performs on the database, which is the chain directory.)(Column 7, lines 26-29; lines 45-48); and the chain directory is configured to generate a chain list that records packet reception time information of the service query packet received from the root chain manager and ID information stored in the service query packet (i.e. *"The connection server 26 then stores these addresses in the database 34 and time stamps the stored addresses using time 32."* The preceding text clearly indicates that chain list is a table contained in a database that is used to store information, where the time information of the service query packet is the time stamp, and ID information is are the stored addresses.)(Column 6, lines 64-66), perform an executable service retrieval process for searching an service that is executable among two chain objects that can be combined based on the IDs recorded in the chain list (i.e. *"The first processing unit 12 then sends a query, including the E-mail address of the callee, to the connection server 26. The connection server 26 then searches the database 34 to determine whether the callee is logged-in by finding any stored information corresponding to the callee's E-mail address indicating that the callee is*

Art Unit: 2165

*active and on-line. If the callee is active and on-line, the connection server 26 then performs the primary point-to-point Internet protocol; i.e. the IP address of the callee is retrieved from the database 34 and sent to the first processing unit 12. The first processing unit 12 may then directly establish the point-to-point Internet communications with the callee using the IP address of the callee.*" The preceding text clearly indicates that the two chain objects are the first processing unit and the callee, which between the two establishes a point-to-point Internet communication, which will establish unique IDs for each chain object, all of which is stored in the database. The connection server performs an executable service retrieval process, which is a search or query on the database, which contains information stored in a table, which is a chain list.)(Column 7, lines 24-36), and generate a reply to the service query packet based on a result of the executable service retrieval process (i.e. *"If the callee is not on-line when the connection server 26 determines the callee's status, the connection server 26 sends an OFF-LINE signal or message to the first processing unit 12."* The preceding text clearly indicates that the connection manager sends a reply to the service query packet, which is sending an OFF-LINE signal or message.)(Column 7, lines 38-42), the executable service retrieval process being performed if another service query packet storing a different chain object ID is received from the same root chain manager within a predetermined threshold time (i.e. *"The first processing unit 12 then sends a query, including the E-mail address of the callee, to the connection server 26. The connection server 26 then searches the database 34 to determine whether the callee is logged-in by finding any stored information corresponding to the callee's E-mail address indicating that the callee is active and on-line. If the callee is active and on-line, the connection server 26 then performs the primary point-to-point Internet protocol; i.e. the IP address of the callee is retrieved from the database 34 and sent to the first processing unit 12. The first processing unit 12 may then directly establish the point-to-point Internet communications with the callee using the IP address of the callee."* The preceding text clearly indicates that the connection server, which is the root chain manager, performs a service retrieval process, which is the query, the another service query packet can be performed when the first processing

Art Unit: 2165

unit does not find the callee, which is a chain object, with an IP address, which is the chain object ID, it is looking for, but instead finds another callee.)(Column 7, lines 24-36).

As per claim 3, Mattaway teaches a data processing system wherein: the chain manager ID is an ID that is applicable as a communication address (i.e. *"In the exemplary embodiment and without loss of generality, the first processing unit 12 is the caller processing unit and the second processing unit 22 is the callee processing unit. When either of processing units 12, 22 logs on to the Internet via a dial-up connection, the respective unit is provided a dynamically allocated IP address by an Internet service provider."* The preceding text clearly indicates that the chain manager ID is an ID that is an IP address, which is a type of a communication address to communicate to another processing unit on the network, assigned by an Internet Service Provider.)(Column 6, lines 53-59).

As per claim 4, Mattaway teaches a data processing system wherein: the root chain manager is configured to control the service execution by circulating a chain token among the chain managers corresponding to the chain objects participating in the service based on the reply to the service query packet to the chain directory (i.e. *"Referring to Fig 8, in conjunction with Figs 1, and 3-4, the disclosed point-to-point Internet protocol and system 10 are illustrated. Connection server 26 starts the primary point-to-point Internet protocol, in step 64, and timestamps and stores E-mail and IP addresses of logged-in users and processing units in the database 34 in step 66. Connection server receives a query from a first processing unit 12 in step 68 to determine whether a second user or second processing unit 22 is logged-in to the Internet 24, with the second user being specified, for example, by E-mail address. Connection server 26 retrieves the IP address of the specified user from the database 34 in step 70, if the specified user is logged-in to the Internet, and sends the retrieved IP address to the first processing unit 12 to establish point-to-point communication with the specified second user."* The preceding text clearly indicates that the root chain

manager is the connection server, which controls the service execution, that is the search query, and circulates a chain token among the chain managers, which is a query request to logged-in users, and the chain directory is the database.)(Column 12, lines 7-21).

As per claim 5, Mattaway teaches a data processing system wherein: the root chain manager is configured to control the service execution by circulating a first and a second chain tokens among the chain managers corresponding to the chain objects participating in the service, the first chain token being for acquiring program information necessary for performing the service and the second chain token being for requesting start of the program corresponding to the service execution process (i.e. *"First processing unit 12 transmits the E-mail signal as a <ConnectRequest> signal to the Internet 24 in step 78. The E-mail signal is delivered through the Internet 24 using a mail server 28 to the second processing unit in step 80. Second processing unit 22 extracts the session number and the first IP address from the E-mail signal in step 82 and transmits or sends the session number and a second IP address corresponding to the second processing unit 22, back to the first processing unit 12 through the Internet 24 in step 84. First processing unit 12 verifies the session number received from the second processing unit 22 in step 86, and establishes a point-to-point Internet communication link between the first processing unit and second processing unit using the first and second IP addresses in step 88."* The preceding text clearly indicates that the *<ConnectionRequest>* is the first chain token circulated among chain managers, which are processing units. When two processing units interact, it generates the second token to request start of the program, which is the communication link between the first and second processing unit)(Column 12, lines 22-40).

As per claim 6, Mattaway teaches a data processing system wherein: the chain manager is configured to: store an ID of the chain object that is managed by the present

chain manager and service profile information as executable service information (i.e. *"The connection server 26 includes a processor 30, a timer 32 for generating time stamps, and a memory such as a database 34 for storing, for example, E-mail and Internet Protocol (IP) addresses of logged-in units."* *"The first processing unit 12 then sends a query, including the E-mail address of the callee, to the connection server 26. The connection server 26 then searches the database 34 to determine whether the callee is logged-in by finding any stored information corresponding to the callee's E-mail address indicating that the callee is active and on-line. If the callee is active and on-line, the connection server 26 then performs the primary point-to-point Internet protocol; i.e. the IP address of the callee is retrieved from the database 34 and sent to the first processing unit 12. The first processing unit 12 may then directly establish the point-to-point Internet communications with the callee using the IP address of the callee."* The preceding text clearly indicates that the connection server is the chain manager that stores and ID of the chain object, which is storing the IP address of the logged-in units and service profile information is the timestamp and E-mail address.)(Column 4, lines 51-54; Column 7, lines 25-36); performs an ID notification process for the ID of the chain object to be managed based on the service profile information in response to the request of an ID acquisition process from the root chain manager (i.e. *"The connection server 26 then searches the database 34 to determine whether the callee is logged-in by finding any stored information corresponding to the callee's E-mail address indicating that the callee is active and on-line."* *"The connection server 26 may be instructed to update the user's information in the database 34 by an off-line message, such as a data packet, sent automatically from the processing unit of the user prior to being disconnected from the connection server 26."* The preceding text clearly indicates that the connection server is the root chain manager that generates a service query packet, which is a data packet, to perform the query process, which is the search that it performs on the database, which is the chain directory.)(Column 7, lines 26-29; lines 45-48); and performs a data storage process and a program triggering process, the data storage process being performed for a received chain token based on the service

Art Unit: 2165

profile information in response to the received chain token from the root chain manager, and the program triggering process being performed based on the received chain token (i.e. *“The first processing unit 12 then sends a query, including the E-mail address of the callee, to the connection server 26. The connection server 26 then searches the database 34 to determine whether the callee is logged-in by finding any stored information corresponding to the callee's E-mail address indicating that the callee is active and on-line. If the callee is active and on-line, the connection server 26 then performs the primary point-to-point Internet protocol; i.e. the IP address of the callee is retrieved from the database 34 and sent to the first processing unit 12. The first processing unit 12 may then directly establish the point-to-point Internet communications with the callee using the IP address of the callee.”* The preceding text clearly indicates that the steps to execute the data storage process is contained in storing information to the database once the first processing unit determines that the callee is active and on-line. )(Column 7, lines 24-36).

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farhan M. Syed whose telephone number is 571-272-7191. The examiner can normally be reached on 8:30AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2165

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FMS

*Amir M. F. S.*  
APU Mofiz  
Primary Examiner  
TC 2100